

L-Plastin (E-17): sc-30506

BACKGROUND

Plastins (fimbrins) are members of a family of actin-binding proteins that exhibit a tissue-specific expression pattern. Both L- and T-plastin have been shown to be involved in cytoskeletal reorganization. L-plastin, which is specifically expressed in hematopoietic cell lineage, has been proposed to be involved in the control of cell adhesion and motility. L-plastin is also frequently expressed in cell lines derived from mammary solid tumors and is implicated in cancer invasion and metastasis. L-plastin is also expressed in the majority of human cancer cell lines that are derived from various types of solid tumors. In addition, L-plastin is involved in regulating of leukocyte adhesion, and the phosphorylation of L-plastin is implicated in modulating integrin regulation signaling pathways. T-plastin is unique in that it is expressed in many types of tissues and notably absent in leukocytes.

REFERENCES

1. Lin, C.S., Lau, A. and Lue, T.F. 1998. Analysis and mapping of plastin phosphorylation. *DNA Cell Biol.* 17: 1041-1046.
2. Jones, S.L., Wang, J., Turck, C.W. and Brown, E.J. 1998. A role for the actin-bundling protein L-plastin in the regulation of leukocyte integrin function. *Proc. Natl. Acad. Sci. USA* 95: 9331-9336.
3. Lin, C.S., Lau, A., Huynh, T. and Lue, T.F. 1999. Differential regulation of human T-plastin gene in leukocytes and non-leukocytes: identification of the promoter, enhancer, and CpG island. *DNA Cell Biol.* 18: 27-37.
4. Lapillonne, A., Coue, O., Friederich, E., Nicolas, A., Del Maestro, L., Louvard, D., Robine, S. and Sastre-Garau, X. 2000. Expression patterns of L-plastin isoform in normal and carcinomatous breast tissues. *Anticancer Res.* 20: 3177-3182.
5. Lin, C.S., Lau, A., Yeh, C.C., Chang, C.H. and Lue, T.F. 2000. Upregulation of L-plastin gene by testosterone in breast and prostate cancer cells: identification of three cooperative androgen receptor-binding sequences. *DNA Cell Biol.* 19: 1-7.

CHROMOSOMAL LOCATION

Genetic locus: LCP1 (human) mapping to 13q14.13; Lcp1 (mouse) mapping to 14 D3.

SOURCE

L-Plastin (E-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of L-Plastin of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-30506 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

L-Plastin (E-17) is recommended for detection of L-Plastin of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000). L-Plastin (E-17) is also recommended for detection of L-Plastin in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for L-Plastin siRNA (h): sc-43208, L-Plastin siRNA (m): sc-43209, L-Plastin shRNA Plasmid (h): sc-43208-SH, L-Plastin shRNA Plasmid (m): sc-43209-SH, L-Plastin shRNA (h) Lentiviral Particles: sc-43208-V and L-Plastin shRNA (m) Lentiviral Particles: sc-43209-V.

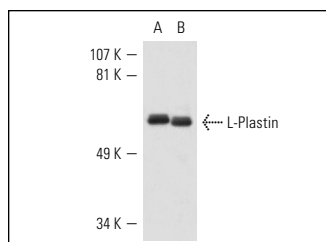
Molecular Weight of L-Plastin: 65 kDa.

Positive Controls: rat PBL whole cell lysate, CCRF-CEM cell lysate: sc-2225 or THP-1 cell lysate: sc-2238.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



L-Plastin (E-17): sc-30506. Western blot analysis of L-Plastin expression in rat PBL (A) and THP-1 (B) whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

MONOS
Satisfaction
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Try **L-Plastin (B-9): sc-133218** or **L-Plastin (C-4): sc-133219**, our highly recommended monoclonal alternatives to L-Plastin (E-17).